



MUR1020 THRU MUR1060

SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 10.0 Amperes

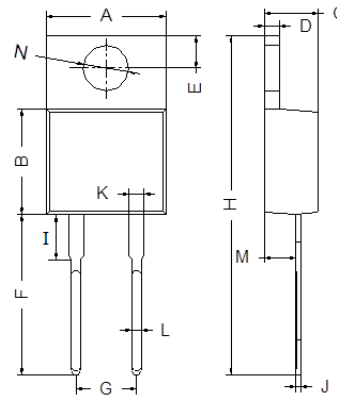
FEATURES

- Low cost.
- Low leakage.
- Low forward voltage drop.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and Similar solvents.
- The plastic material carries U/L recognition 94V-0

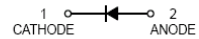
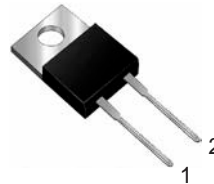
MECHANICAL DATA

Case: TO-220AC
Molding Compound: UL Flammability Classification Rating 94V-0
Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

TO-220AC



TO-220AC		
Dim	Min	Max
A	9.80	10.30
B	8.30	8.90
C	4.37	4.77
D	1.10	1.45
E	2.62	2.87
F	13.14	13.74
G	4.98	5.18
H	28.40	29.16
I	3.55	4.05
J	0.35	0.58
K	1.20	1.32
L	0.68	0.94
M	2.40	2.60
N	3.71	3.91
All Dimensions in mm		



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR1020	MUR1040	MUR1060	Unit
V_{RRM}	Reverse Peak Reverse Voltage	200	400	600	V
V_{RMS}	RMS Voltage	140	280	420	V
V_{DC}	DC Blocking Voltage	200	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ C$	10.0			A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimposed on Rsted Load	100			A
I_R	Reverse Current $V_R=V_{RRM}, T_A=25^\circ C$ $V_R=V_{RRM}, T_A=150^\circ C$	5.0 250	10 500		μA
V_F	Forward Voltage $I_F=10A$	0.98	1.30	1.50	V
t_{rr}	Reverse Recovery Time $I_F=0.5A, I_R=1A, I_{rr}=0.25A$	25	50		ns
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	4.0			$^\circ C/W$
$T_j T_{stg}$	Operating Junction and Storage Temperature Range	- 55 to +150			$^\circ C$



Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

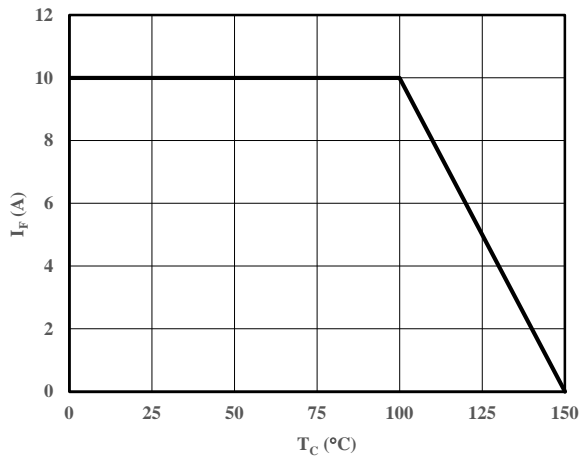


Fig 1 Current Derating Curve

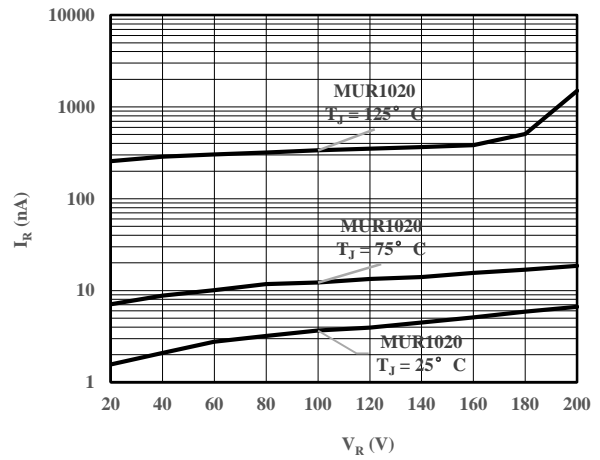


Fig 2 Typical Reverse Characteristic

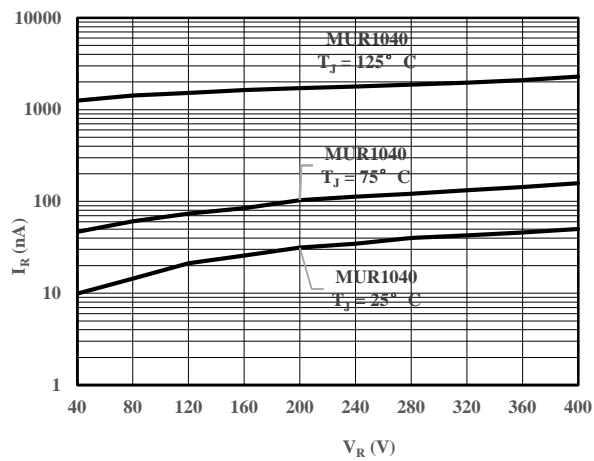


Fig 3 Typical Reverse Characteristic

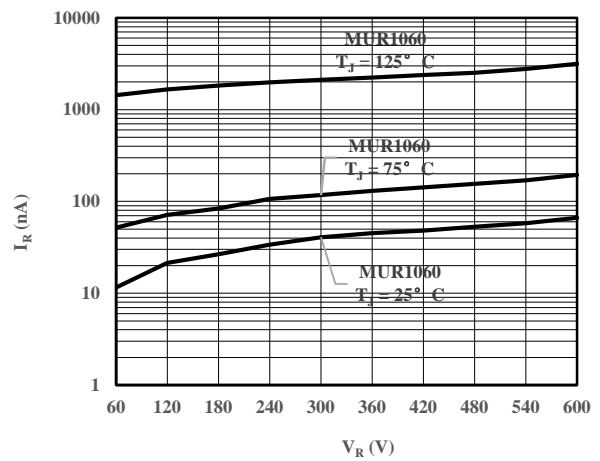


Fig 4 Typical Reverse Characteristic

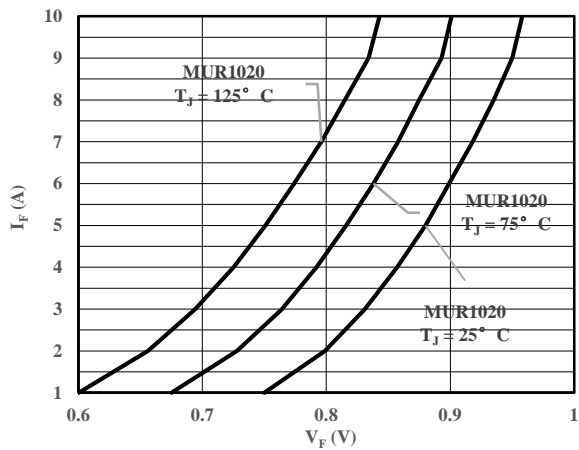


Fig 5 Typical Forward Characteristic

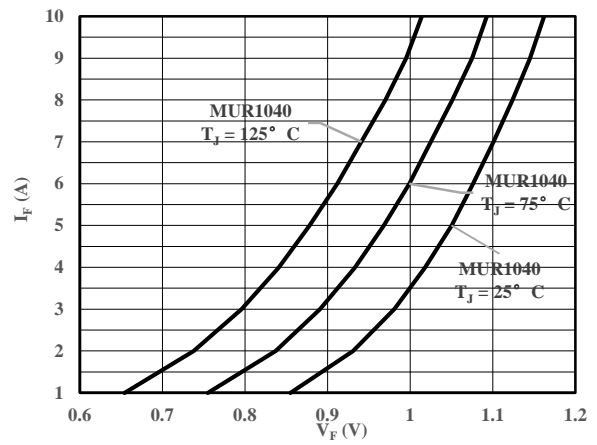


Fig 6 Typical Forward Characteristic

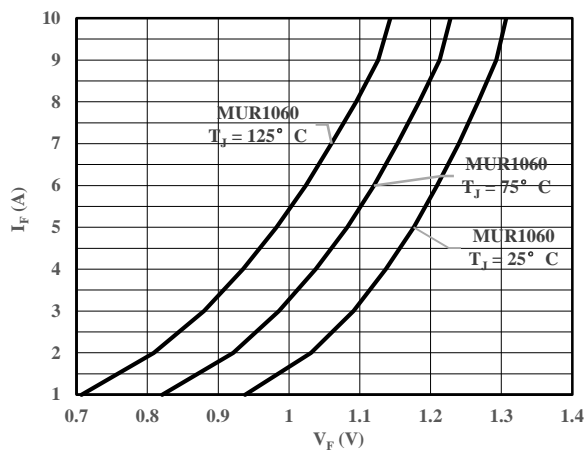


Fig 7 Typical Forward Characteristic